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Catalogue no. 92F0027XDB

Postal Code Conversion File (PCCF)

Reference Guide



STATISTIQUE CANADA

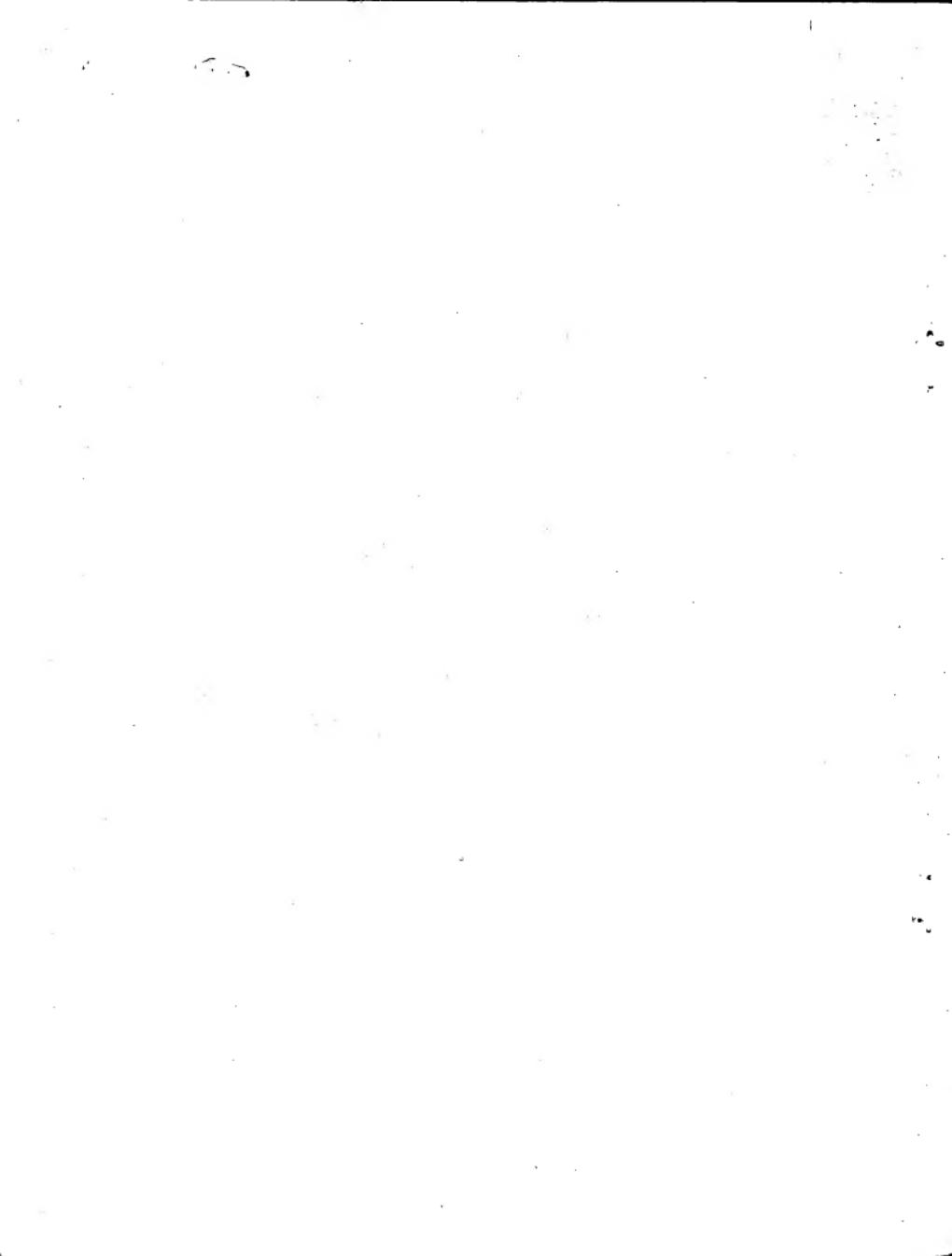
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Statistics Canada

Postal Code Conversion File

June 1997 Postal Codes

Reference Guide

Published by authority of the Minister
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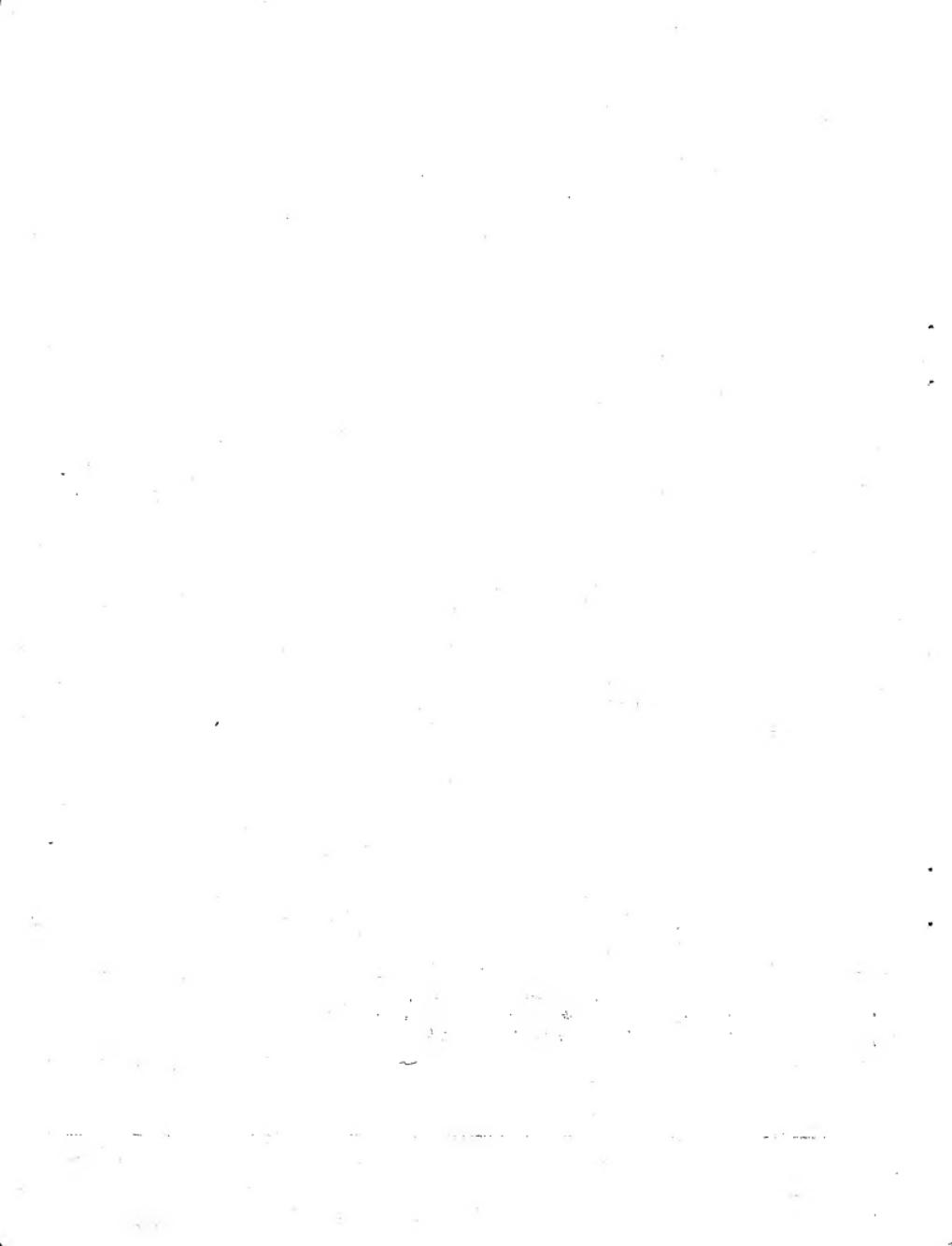
December 1997

Reference Guide for Catalogue 92F0027XDB

Ottawa

Note of appreciation

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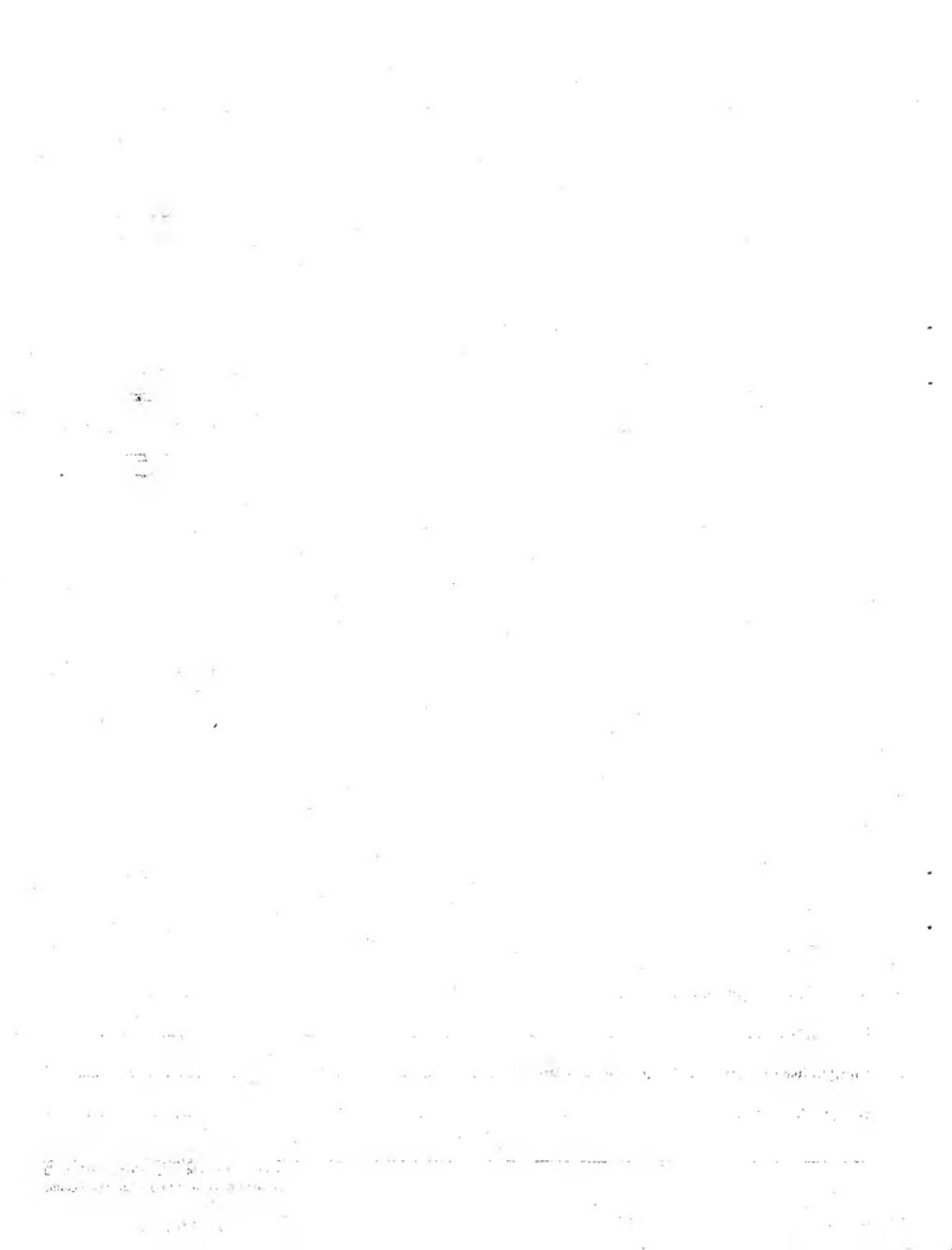
What's New in the 1996 Postal Code Conversion File

- Postal codes are linked to the 1996 Census geographic areas
- Postal codes are linked to the latest Federal Electoral Districts (1996 Representation Order)
- Postal codes reported in the 1996 Census were used to improve linkages



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1. About this guide

This reference guide was prepared to accompany the Postal Code Conversion File (PCCF), (Catalogue No. 92F0027XDB). It provides general information about the PCCF, including a description and the general methodology used to create it.

The Data Quality section gives a detailed description of the various steps in the creation of the PCCF. This statement also provides information to evaluate the suitability of the data for a particular use.

A record layout and field descriptions are provided in the Technical Specifications section.

Geographic terms and concepts highlighted in **bold** in the text are described in the glossary. More details can be found in the *1996 Census Dictionary*, Catalogue No. 92-351-XPE. Supplementary information is provided in the appendices and a list of related products and services is also included.

This reference guide is based on the best information available at the time of its release. It in no way constitutes a warranty of the data in the event that users may observe characteristics that deviate from those stated in this document. All efforts have been made to ensure that the verification of this product has been thoroughly done, however, there is no guaranty that the data are 100% accurate. For further information see Section 4, Data Quality.

2. Overview

The Postal Code Conversion File (PCCF) is a digital file which provides a correspondence between the six character postal code and Statistics Canada's standard geographical areas for which census data and other statistics are produced. Through the link between postal codes and standard geographic areas, the PCCF permits the integration of data from various sources.

The geographic co-ordinates attached to each postal code on the PCCF are commonly used to map the distribution of data for spatial analysis (e.g., clients, activities). The location information is a powerful tool for marketing, planning, or research purposes.

In April 1983, the Geography Division released the first version of the PCCF which linked postal codes to census geographic areas and included geographic co-ordinates. Since then, the file has been updated on a regular basis to keep up with postal code changes provided by Canada Post Corporation.

Every five years, the postal code linkages on the PCCF are "converted" to the latest census geographic areas. The original PCCF was linked to the 1981 Census geographic areas. Since then, the PCCF has undergone three "conversions", following the 1986, 1991 and 1996 censuses. An automated system was developed for the 1991-1996 conversion. Also, for the first time, the 1996 Census reported postal codes were used to validate the PCCF links.

3. About this product

This version of the Postal Code Conversion File (PCCF) contains 733,981 postal codes (690,109 active, 43,872 retired). This represent all valid postal codes as of June 1997 according to Canada Post Corporation. These postal codes are linked to the geographic areas used in the 1996 Census and to latitude/longitude co-ordinates.

Postal codes are not restricted to census geographic boundaries and therefore may be linked to more than one enumeration area (EA) or be assigned more than one set of co-ordinates. Therefore, one postal code may be represented by more than one record.

The following table provides the number of unique postal codes and total records by province and territory:

Province/Territory	Number of postal codes	Number of records
Newfoundland	7,589	11,643
Prince Edward Island	2,856	3,841
Nova Scotia	20,042	25,661
New Brunswick	20,639	30,844
Quebec	187,019	255,644
Ontario	261,542	351,926
Manitoba	24,621	31,164
Saskatchewan	22,188	28,879
Alberta	70,859	95,822
British Columbia	115,094	168,757
Yukon Territory	944	1,363
Northwest Territories	588	875
Canada Total	733,981	1,006,419

Postal codes can straddle provincial boundaries. See Appendix B for more information.

3.1. Content

Each record on the PCCF consists of the following (for more detailed information refer to Section 5 -*Technical Specifications*):

- a six character postal code
- the unique enumeration area (EA) identifier --made up of the province code, the federal electoral district (1987 Representation Order) code and the EA code-- for the EA linked to the postal code
- geographic codes of all other higher level standard geographic areas in which the EA is located
- the federal electoral district code (1996 Representation Order)
- the census subdivision (CSD) name, code and type
- latitude/longitude co-ordinates representing approximate point location for the postal code

- Canada Post Corporation (CPC) information relevant to each postal code - its birth date, retirement date, type of mail delivery, and CPC community name
- various flags : single link indicator, type of representation point, EA type, and postal code type

Purchasers of the PCCF also receive supplementary "Names" files. Due to the size of the name fields, and because of their repetition, the names are provided on separate files:

- Census Division Names File (CD96.DAT)
- Federal Electoral District Names File - 1996 Representation Order (FED96.DAT)
- Census Metropolitan Area/Census Agglomeration Names File (CMACA96.DAT)
- Primary CMA/Primary CA Names File (PCMAPCA96.DAT)

The basic link between the postal code and other standard census geographic areas is made through one or more 1996 enumeration areas (EA). The geographic areas contained on the PCCF are shown on the hierarchy chart provided as Appendix A.

Federal electoral districts (FED) (1996 Representation Order) codes are also included on the PCCF, however they are not a standard geographic area for the 1996 Census. Postal codes can be linked to the Nunavut Territory through the new Federal Electoral District of Nunavut (FED96uid = 61001).

3.2. General methodology

The Postal Code Conversion File is updated on a regular basis and is released every six months. The regular maintenance of the file takes the postal code changes continually introduced by Canada Post Corporation (CPC) and finds the corresponding census geographic areas. Every five years, after each census, the PCCF must be re-based to the new census geographic areas.

CPC provides Statistics Canada with a file every month containing the latest postal codes, address ranges and other attributes (e.g., delivery mode type). The address information is used to determine the location or the extent of a given postal code and relate it to the latest enumeration area boundaries. Within major urban areas, postal code address ranges are linked to a digital street network maintained by Statistics Canada, and wherever possible, a block-face link is identified. Municipality maps are used where necessary and as a last resort, contact is made with local authorities to get as precise a street location as possible. The relationship to enumeration area (EA) is then determined by referring to the enumeration area census collection maps to find the same street. All other postal code links to geographic areas are derived through the EA.

3.3. Reference date

The **geographic reference date** is a date determined by Statistics Canada for the purpose of finalizing the geographic framework for which census data will be collected, tabulated and reported. For the 1996 Census geographic areas, the reference date is **January 1, 1996**.

The reference date for postal codes contained in the Postal Code Conversion File is documented with each release.

3.4. Limitations

3.4.1. Multiple records

The postal code conversion file contains multiple records for a postal code when the postal code straddles more than one block-face or enumeration area. Multiple records are quite common for rural postal codes and community mail boxes.

- Rural postal codes are defined in terms of rural routes which are not explicitly attached to dwellings as are civic address ranges. These routes tend to straddle several enumeration areas, often crossing boundaries of standard geographic areas such as census tracts or census subdivisions. It is difficult, if not impossible, to identify a precise physical location based on a rural postal code.
- Community mail boxes are a growing source for multiple records on the PCCF. In new urban delivery areas, postal codes are assigned to a community mail box that may cover partial blocks, both sides of a street and different streets within a 300 metre radius. These situations often result in multiple links being established between the postal code and block-faces, unlike the more traditional urban postal code which correspond generally to a block-face.

The "single link indicator" was created to assist users in dealing with multiple records. The method used to establish the single link indicator attempts to identify the geographic area with the majority of dwellings using the particular postal code. Users should be cautioned that only a partial correspondence between the postal code and other geographic areas is achieved when using the single link indicator.

The following table presents the number of postal codes (including retired postal codes) showing the occurrence of multiple links for selected geographic areas.

Geographic area	Postal codes with multiple links
Enumeration area	142,626
Census tract	24,161
Census subdivision (municipality)	12,918
Census division	1,787

3.4.2. Mailing address versus physical location

The address associated with a postal code does not always represent the location of those receiving mail using that postal code. This is particularly the case in rural areas, where rural route service and post office pick-up are commonly used to deliver mail.

A typical rural route address, such as "RR#3 Caledon, Ontario", does not provide sufficient address information to identify a precise physical location. A post office address such as "Box 11200, Stn. H" is also imprecise and not explicitly attached to the dwellings served by that postal code. Consequently, rural postal codes on the PCCF can not be used in the same manner as most urban postal codes can to precisely geo-reference a physical location.

Similarly, postal codes with a delivery mode type "K" (group of post office boxes) or "M" (one post office box) do not provide a precise indication of the address of people who rent a post office box. These postal codes are linked to

the location of the post office on the PCCF since there is no information available on the physical location of customers.

4. Data quality

The purpose of this data quality statement is to provide detailed information so that users may evaluate the suitability of the data for their use. Five fundamental components of a data quality statement are: lineage, positional accuracy, attribute accuracy, logical consistency and completeness. (See Statistics Canada, 1992.)

4.1. Lineage

Lineage includes descriptions of the source material from which the data were derived and the methods of derivation, including the dates of the source material and all transformations involved in producing the final Postal Code Conversion File product.

The PCCF is the result of two updating activities. One is the ongoing maintenance activity which links the latest postal codes from Canada Post Corporation to census geographic areas. These links are continuously recorded on the Geography Division's postal code data base. The other update activity is done every five years, after each census, to re-link the data base to the latest census geographic areas.

4.1.1. Postal code to EA links - Ongoing updates (sources)

The sources used to keep up with ongoing postal code updates are:

- Canada Post Corporation Address look-up file and auxiliary files,
- in-house digital Street Network Files (SNF),
- enumeration area collection maps,
- maps provided by other sources (e.g., municipalities), and
- telephone contact with local authorities.

4.1.2. Postal code to EA links - Ongoing updates (process)

The procedures for linking postal codes to census geographic areas depend on whether the postal code is located within or outside the areas covered by Street Network Files (SNF).

Within SNF Areas

In areas covered by digital street network files, an attempt is made to link postal codes to one or more **block-faces**. The list of new postal code and address range records from Canada Post Corporation (CPC) is matched to the SNF street listings according to elements common to both files, i.e., province, municipality, street name, type, direction and address range.

Once matched, the postal code, province code, enumeration area code and block-face **representative point** are transferred to the postal code data base.

For those postal codes in SNF areas that cannot be coded by the above method, and for all other urban postal codes in non SNF areas, municipal maps are used to find the street(s). When a street is found, the same street is located on a

Census collection map and the address range is then used to link to the EA or, if available on the SNF, to the block-face representative point(s) for that postal code.

If a street cannot be found on a municipal map, local authorities (such as Planning and Engineering Departments and local post offices) are contacted to assist in the location of the street. In areas experiencing growth, new maps are requested from the proper authority. After the street is located, Census collection maps are used to determine the enumeration area.

Rural postal codes

A rural postal code denotes an area serviced by rural route delivery from a post office or postal station. A zero (0) in the second position of the postal code identifies a rural postal code. Such an area can cross several geographic boundaries. The 1991 and 1996 Census collection documents are used to help determine these service areas.

Post Office Addresses

In some cases, the ultimate destination of mail delivery is not the same as the pick-up point. For example, in urban areas postal codes may be associated with post office boxes at a postal station. In these cases, the geographic link for the postal code provided by the Postal Code Conversion File (PCCF) identifies the location of the post office rather than the residential, industrial or commercial location of the client renting a post office box.

4.1.3. Update from 1991 to 1996 Census Geography (sources)

The sources used to update the census geography linkage from 1991 to 1996 were:

- June 1997 postal codes and address range information from Canada Post Corporation,
- preliminary 1996 block face and representative points data,
- 1991-1996 Enumeration Area Correspondence File,
- 1996 Enumeration Area Digital Boundary Files,
- 1996 Federal Electoral District Digital Boundary File (1996 Representation Order) and,
- 1996 Census Reported Postal Code data.

4.1.4. Update from 1991 to 1996 Census Geography (process)

The method used to bring the PCCF from 1991 to 1996 Census geographic links is somewhat different from previous conversions. The steps can be summarized as follows:

1. Automated address range matching
2. Assigning 1996 EA using 1991 links (EA correspondence file)
3. Validating and changing preliminary conversion results using 1996 Census data

4. Adding the Federal Electoral District (1996 Representation Order) code
5. Assigning the single link indicator to flag the "best" record for each postal code.

Step 1: Automated address range matching

This conversion used a new approach to link current postal codes to the 1996 Census geography. For the first time, address range information from Canada Post Corporation was used to find an associated block-face and enumeration area link directly on the 1996 Street Network Files (SNF). Where this was successful, block-face representative point(s) and enumeration area links were generated without any reference to the 1991 linkages assigned previously to the same postal code.

Step 2. Assigning 1996 EA using 1991 links (EA correspondence file)

Where a match could not be found through the automated address matching approach, the 1991-96 enumeration area (EA) correspondence was used to bring the postal codes linked to 1991EAs to their corresponding 1996 EAs.

The correspondence file shows the relationship between 1991 EAs and 1996 EAs. Sixty percent (60%) of enumeration areas did not change between 1991 and 1996. For all postal codes linked to these EAs, the conversion process kept the equivalent 1996 EA. Where EA boundaries changed between 1991 and 1996 (40% of all enumeration areas), the EA correspondence file created a link to all EAs involved in the change. This process was used in the two previous conversions and is known to introduce a number of questionable links to the PCCF. For the first time, census data was used to validate or reject some of these links.

Step 3. Validating and changing preliminary conversion results using the 1996 Census data

The relationship between the postal code and EAs as reported by the 1996 Census was used to confirm and to modify postal code to EA linkages created through the automated Step 1 and 2 above. Postal codes reported in the Census do not represent the entire universe of postal codes. Also, the postal codes reported in the census may represent a location other than that of a respondent's usual place of residence, such as work place or post office box. Despite these limitations, the 1996 Census reported postal codes were considered to be a valuable source for the validation of postal code to enumeration area linkages on the PCCF.

There were 620,357 postal code to EA linkages on the PCCF confirmed by the 1996 Census data.

Postal code to EA linkages obtained in Step 1 and 2 but not confirmed by the census data were judged valid if:

- the postal code was linked to a block-face,
- the postal code was not reported in the census (there were 114,915),
- the postal code had a business delivery mode type,
- the postal code to EA link represented the location of a post office.

In total, 86,228 links did not meet any of these criteria and were rejected.

Postal code to EA links were added to the PCCF using the 1996 Census reported postal code data if they met one of the following criteria:

- > most people reporting the postal code lived in that EA,
- > most people in the EA reported the postal code,
- > a large population or a large number of households reported the postal code within the EA.

Another 30,521 links were added to the PCCF using these criteria.

Step 4. Adding the Federal Electoral District (1996 Representation Order)

The 1996 Representation Order Federal Electoral Districts (1996 FEDS) were defined by Elections Canada after the 1996 Census enumeration areas were delineated for the census taking. As a result, EA boundaries do not respect 1996 FED limits. In order to link postal codes to these new FEDs, a boundary overlay (point in polygon) was performed. The Federal Electoral District digital boundary file was overlaid onto the latest postal code co-ordinates. If a postal code had multiple co-ordinates (linked to more than one EA) falling into more than one federal electoral district, the PCCF assigns that postal code to all relevant FEDs.

Step 5. Assigning the single link indicator

Many postal codes are represented by multiple records on the PCCF. This can become problematic for some applications and therefore, a flag identifying a "single" link for each postal code has been created. The single link indicator was previously referred to as the *single postal code indicator*.

The single link indicator has the value "1" to flag the "best" (or only) link for a given postal code. The value "0" indicates an additional record.

In urban areas, the indicator is assigned based on CPC address ranges. For each address range associated with a postal code, the low address is subtracted from the high address. The address range with the highest difference is determined and that postal code record is selected as the best link and assigned the value "1". In cases where the postal code spans more than one EA, the address range differences are totalled for each EA, and the EA with the highest total difference is selected as the single link indicator.

The same approach was used in rural areas when address ranges were available. Otherwise, the EA representing the location of the post office was selected to best represent the postal code, irrespective of the location of people using the postal code.

Users should be cautioned that by using the single link indicator, only a partial correspondence between the postal code and other geographic areas is achieved.

4.2. Positional accuracy

Positional accuracy is the difference between the "true" position of a feature in the real world and the "estimated" position stored in the Postal Code Conversion File.

The geographic co-ordinates assigned to postal codes are those of either block-face or enumeration area representative points calculated for census purposes. Therefore, the positional accuracy of the postal code is dependent on :

- the accuracy of the links established between the postal code and the EA, and
- the positional accuracy of the EA and block-face representative points with respect to the EA or block-face.

4.2.1. Accuracy of the linkages

The different methods used to create linkages on the PCCF result in varying degrees of accuracy for those linkages. Postal codes linked to block-faces (46% of the total number of records) are considered to be the most accurate, as they have been linked as close as possible with the address ranges representing the location of the postal code according to Canada Post Corporation.

Where the block-face link could not be produced, postal codes have been linked to enumeration areas. Approximately 68% of the total number of postal code to enumeration area links contained in the PCCF are validated by 1996 Census data.

There is no further measurement of data quality available to describe the accuracy of the linkages. It is acknowledged however, that an accumulation of multiple records caused by the use of the EA correspondence file over time has produced some degree of overcoverage.

4.2.2. Accuracy of the geographic co-ordinates

No measurements of positional accuracy of the representative points were made. Positional accuracy is presented here in terms of descriptive statements.

Generally, the block-face geographic co-ordinates are relatively accurate point locators for a postal code. The 1996 Street Network files (Statistics Canada) were used to create the block-face representative points. Therefore, relative positional accuracy is maximized when the PCCF is used in conjunction with these files.

Where the block-face link could not be produced, the geographic co-ordinate provided is the enumeration area representative point. While this is much less precise and may not be suitable for small area market studies, it is readily available and may give an acceptable level of precision for larger scale studies.

The geographic co-ordinates contained on the PCCF were overlaid on the Enumeration Area Digital Boundary Files to confirm that virtually all points fall within their respective EA boundaries.

The geographic co-ordinates provided on this version of the PCCF vary in their relative precision depending on the type of representative point. Enumeration areas representative points have 6 decimal places and block-face representative points have 4 or 5 decimal places.

For more information on the method used to calculate representative points for block-faces and EAs, refer to Appendix D.

4.3. Attribute accuracy

Attribute accuracy refers to the accuracy of the non-positional information attached to each postal code.

The PCCF is essentially a flat file giving attributes for postal codes and for the enumeration area (s) linked to the

postal code. Most of these attributes are taken from two independent sources. Some attributes were also created for the PCCF.

The geographic codes, types and names of all other higher level standard geographic areas in which the EA is located are taken from the 1996 Geographic Attribute Data Base. This database is created and maintained by the Geography Division of Statistics Canada. A very small number of linkage errors have been identified on that database since it's final certification in the early part of 1997. Due to operational constraints, it is not possible to make the adjustments to the data base. Information on these errors can be obtained from Statistics Canada.

The information relevant to each postal code -- birth date, retirement date, delivery mode type, type of postal code and CPC community name - is carried forward from Canada Post Corporation Address look-up file and auxiliary files. In some cases, the postal code type was imputed by Statistics Canada (refer to Section 5. Technical Specifications). The historic delivery mode type was retrieved from historic files maintained by Statistics Canada.

The federal electoral district (1996 Representation Order) were assigned to postal codes in an overlay process, using the representative points and the digital FED boundary file. These digital boundaries may deviate from the exact description of the 1996 Representation Order Federal Electoral District as defined by Elections Canada. However, it has been demonstrated that the 1991 population counts obtained using these boundaries never differed by more than 1 % from the official 1991 population counts.

The single link indicator (refer to section 4.1.4, Step 5) and the type of representative point were derived by Statistics Canada. No measure of the accuracy of these fields were made.

4.4. Logical consistency

Logical consistency is the degree to which features are accurately represented in the data structure and fulfil all the internal requirements of the data structure. In other words, how well elements of the data structure follow the rules imposed on them.

In some cases, especially in rural areas, the postal code service areas do not respect EA boundaries. When this occurs, the same postal code will be repeated two or more times with different geographical information (i.e., different co-ordinates or EA codes. These multiple records for a postal code reflect the relationship between the postal code and census geographic areas. Also, a postal code can be linked to more than one block-face within the same enumeration area.

Conversely, different postal codes could have the same co-ordinate. This happens where more than one postal code have been linked to the same EA. Also, more than one postal code can be linked to a single block-face.

4.5. Consistency with other products

Data contained on the Postal Code Conversion File are consistent with all 1996 Census related geographic products with the following exceptions:

- *Postal Code Counts* (Cat. No. 92F0086XCB) and *1996 Census Forward Sortation Areas Digital Cartographic File* (Cat. No. 92F0039XDE) represent only the postal codes reported in the 1996 Census and valid as of June 1996. The PCCF provides all postal codes (both in use and retired) and is update twice a year to include recent postal codes.

➤ *Block-face Data File* : the block-face representative points contained on the PCCF were based on a preliminary version of this file. The main difference lies in the precision of the representative points. The final Block-face Data File contains representative points with 6 decimal places. The version used in the conversion process had only 4 or 5 decimal points.

4.6. Completeness

Completeness expresses the degree to which the geographic entities (features) are captured according to the data capture specifications. It also contains information about selection criteria, definitions used and other relevant mapping rules.

Completeness in the context of the PCCF is the degree to which all valid postal codes are accounted for on the PCCF and all geographic codes from the 1996 Census are linked to a postal code. There are 455 postal codes, valid as of June 1997 according to Canada Post Corporation, for which it was not possible to determine a link to census geography. Inversely, out of a total of 49,361 enumeration areas, there are 862 which are not linked to postal codes on the PCCF. These are unpopulated or incompletely enumerated EAs.



5. Technical specifications

5.1. System requirements

The PCCF does not include any software or instructions on how to use the product within specific Geographical Information Systems (GIS) or mapping packages.

5.2. Record layout

The current version of the PCCF includes five files: the "PCCF" file and four "Names" files.

Users familiar with the 1991 version of the PCCF should take note of the following changes, affecting both the record layout and content:

- The order in which the fields are displayed on the file is changed
- Historic Delivery Mode Type (for retired postal codes or changes in DMT) has been added
- The Delivery Mode Type (DMT) for rural postal codes has been changed from "blank" to "W"
- Single Postal Code Indicator is now called *Single Link Indicator*
- Designated Place code has been added (new standard geographic area in 1996)
- Year expanded from two (2) to four (4) digits in *Birth Date* and *Retired Date*
- The space for *Census Subdivision Name* has been expanded to ensure the longest names are complete
- Subprovincial regions are now called *Economic Regions*

The following information is no longer included on the file:

- UTM (Zone, X, Y co-ordinates)
- Statistics Canada Regional Reference Centre code
- Census Tract code (note that CT name remains on the file)

5.4. Field description

1 Postal Code

The Canadian postal code offers a unique reference system which provides a means of identifying a mail delivery location. It is composed of six characters, in the form of "ANA NAN", where "A" represents a letter of the alphabet and "N" a number. Refer to *Appendix B* for more information about postal codes.

2 EAuid

Uniquely identifies an enumeration area. The EAuid is composed of the two digit province code, the three digit federal electoral district code (1987 Representation Order) and the three digit enumeration area code.

3 Lat

This field contains the latitude (in degrees and decimals north of the equator) of the EA or block face representative point. The decimal point is explicit.

4 Long

This field contains the longitude (in degrees and decimals west of the prime meridian) of the EA or block face representative point. The decimal point is explicit.

5 SLI

The single link indicator (SLI) can be used to establish a one-to-one relationship between postal codes and enumeration areas or block-face. This field was previously called the *Single Postal Code Indicator*. The single link indicator has the following values:

"1" indicates the "best" (or only) record for the postal code;

"0" indicates an additional record for the postal code.

6 PR

Province/territory code.

Province/Territory	Code	Province/Territory	Code
Newfoundland	10	Manitoba	46
Prince Edward Island	11	Saskatchewan	47
Nova Scotia	12	Alberta	48
New Brunswick	13	British Columbia	59
Quebec	24	Yukon Territory	60
Ontario	35	Northwest Territories	61

7 CDuid (also in the Census Division Name File)

Uniquely identifies a census division. The first two digits of the CDuid identifies the province or territory (PR). Census division names are found in the Census Division Name file.

8 CSD

Identifies a census subdivision (municipality) within a census division. This code should be combined with the census division unique identifier (CDuid) to uniquely identify a census subdivision in the country. The province, census division and census subdivision (municipality) codes represent the 1996 Standard Geographical Classification (SGC).

9 CSDname

Contains the name of the census subdivision (municipality) in effect as of January 1, 1996.

10 CSDtype

This field provides abbreviations used to identify the census subdivision (municipality) type. See Appendix D for the complete list.

11 CCS

Identifies a census consolidated subdivision within a census division. This code should be combined with the census division unique identifier (CDuid) to uniquely identify a census consolidated subdivision in the country.

12 CMA (also in the Census Metropolitan Area / Census Agglomeration Name file)

Uniquely identifies a census metropolitan area or a census agglomeration. Corresponding names are found in the Census Metropolitan Area / Census Agglomeration Name file.

13 CMAtype

Identifies the type of census metropolitan area (CMA) or census agglomeration (CA) in which the enumeration area is located. This field will be left blank where the enumeration area is not part of a CMA or CA.

Code	CMA/ Type CA
A	Consolidated CMA
B	Regular CMA
C	Consolidated CA
D	Regular CA
"blank"	non CMA/CA

14 PCMA (also in the Primary Census Metropolitan Area / Primary Census Agglomeration Name file)

Uniquely identifies a primary census metropolitan area or a primary census agglomeration. Corresponding names are found in the Primary Census Metropolitan Area / Census Agglomeration Name file.

15 PCMAtype

Identifies whether the area is a primary census metropolitan area or a primary census agglomeration. This field will be left blank in cases where the EA is not inside the boundaries of a primary CMA or primary CA.

Code	Type
E	PCMA
F	PCA
"blank"	non PCMA/PCA

16 CTname

Uniquely identifies a census tract within a CMA/CA. This field must be combined with the CMA/CA code to uniquely identify a census tract. CT name field is blank for those postal code records linked to areas not covered by the census tract program.

17 ER

Identifies an economic region within a province. This field must be combined with the province/territory code to uniquely identify an economic region. (Economic region replaces the term "subprovincial region")

18 DPL

Identifies a designated place within a province. This field must be combined with the province/territory code to uniquely identify a designated place.

19 FED96uid (also in the 1996 Federal Electoral District Name File)

Uniquely identifies a federal electoral district (1996 Representation Order). The first two digits of the FED96uid identify the province or territory (PR). Corresponding names are found in the 1996 Federal Electoral District Name file.

20 EAurb_rur

Indicates the urban/rural status of EAs inside and outside census metropolitan areas/census agglomerations (CMAs/CAs) as defined by Statistics Canada. This definition of urban/rural may not correspond to the criteria used by Canada Post Corporation to determine the urban or rural status of a postal code.

Code	Enumeration Area (EA) urban/rural status
1	Urban Core
2	Urban Fringe
3	Rural Fringe
4	Urban Area outside CMAs/CAs
5	Rural area outside CMAs/CAs

21 Rep_Point

Identifies whether the record uses a block-face or an enumeration area (EA) representative point as the co-ordinate. In Street Network File (SNF) areas, block-face representative points are used where possible. When necessary street information is not available, postal codes are associated to the enumeration area representative points. The representative point flag takes one of the following values (total number of records by representative point type is also provided):

Flag	Type	Records
1	Block-face representative points - SNF area	474,508
2	EA representative points - SNF area	250,940
3	EA representative points - non-SNF area	280,971

22 PCtype

Indicates the type of addresses used to identify the points of call served by the postal code. This field was introduced by Canada Post Corporation some time after the creation of the original PCCF. Where possible, a value has been

imputed by Statistics Canada for retired postal codes using historical address information and delivery mode type.

Code	Address Type
1	Street address with letter carrier service
2	Street address with route service
3	Post office box
4	Route service
5	General delivery
"blank"	unknown

23 Comm_Name

The community name, as defined by Canada Post Corporation, denotes any city, town or village in Canada that is recognised as a valid mailing address. Although many appear to be municipality names, CPC community names will not necessarily correspond to the census subdivision names associated with the same record on the file.

24 DMT

Delivery Mode Type as defined by Canada Post Corporation. Note that Statistics Canada assigns a DMT of "W" to rural postal codes (left blank by CPC). In addition to the range of delivery mode types represented in this field, the number of postal codes versus the total number of records by DMT is provided in the following table:

DM T	Description	postal codes	records
A	Letter Carrier Service - Private households and community mail boxes	638,973	824,166
B	Letter carrier Service - Large apartment buildings	15,490	19,600
E	Letter Carrier Service - Business buildings	8,382	12,092
G	Letter Carrier Service - Large volume receivers	8,167	11,319
H	Rural route delivery	1,119	8,199
J	General delivery services	574	907
K	Group of post office boxes	6,736	12,328
M	Post office box	5,177	8,994
T	Suburban service delivery *	105	319
W	Rural postal codes (the second digit of the postal code is "0")	5,384	26,097
X	Mobile route delivery *	2	6
Z	Retired postal codes	43,872	82,392
Total		733,981	1,006,419

* not used frequently by Canada Post Corporation

25 Historic DMT

Retains the previous delivery mode type (DMT) value. The historic DMT takes one of the following values:

1. DMT prior to retirement for retired postal codes,
2. Previous DMT in cases where a postal code has changed DMT but not retired,

3. for retired postal codes when DMT before retirement is not known to Statistics Canada, or
4. current DMT for postal codes that were never retired or never changed DMT.

26 Birth Date

Date (YYYYMMDD) when the postal code became effective. All postal codes created before April, 1983 were given a birth date of 19830401.

27 Retired Date

Date (YYYYMMDD) when a postal code is retired, or in other words, it is no longer in use by Canada Post Corporation. All postal codes retired before April 1983 have 19830401 as the retirement date. Users should note that some postal codes have been retired and re-introduced at a later date. Active postal codes have a retirement date of 19000001.

6. Glossary

Brief definitions of geographic terms and census concepts are presented here in summary form only. Users should refer to the 1996 Census Dictionary (Catalogue No. 92-351-XPE) for the full definitions and additional remarks related to these concepts and definitions.

Block-face

A block-face is one side of a city street between two consecutive street intersections.

Block-faces are also formed when streets intersect other visible physical features (such as railroads, power transmission lines and rivers) and when streets intersect with enumeration area boundaries.

Census Division (CD)

Census division (CD) is the general term applied to areas established by provincial law which are intermediate geographic areas between the municipality (*census subdivision*) and the province level. Census divisions represent counties, regional districts, regional municipalities and other types of provincially legislated areas.

In Newfoundland, Manitoba, Saskatchewan and Alberta, provincial law does not provide for these administrative geographic areas. Therefore, census divisions have been created by Statistics Canada in cooperation with these provinces for the dissemination of statistical data. In the Yukon Territory, the census division is equivalent to the entire territory.

Census Metropolitan Area (CMA), Census Agglomeration (CA), Consolidated Census Metropolitan Area, Consolidated Census Agglomeration, Primary Census Metropolitan Area (PCMA), Primary Census Agglomeration (PCA)

The census metropolitan areas, census agglomerations, consolidated census metropolitan areas, consolidated census agglomerations, primary census metropolitan areas and primary census agglomerations are delineated using the same conceptual base. The overall concept for delineating these geographic areas is one of a large urban area together with adjacent urban and rural areas that have a high degree of social and economic integration with this urban area. Metropolitan area is a general term for all these areas. Non-metropolitan area is a term for all areas outside of the metropolitan area.

Census Metropolitan Area (CMA)

A census metropolitan area (CMA) is a very large urban area (known as the urban core) together with adjacent urban and rural areas (known as urban and rural fringes) that have a high degree of social and economic integration with the urban core. A CMA has an urban core population of at least 100,000, based on the previous census. Once an area becomes a CMA, it is retained as a CMA even if the population of its urban core declines below 100,000. All CMAs are subdivided into census tracts. A CMA may be consolidated with adjacent census agglomerations (CAs) if they are socially and economically integrated. This new grouping is known as a consolidated CMA and the component CMA and CA(s) are known as the *primary census metropolitan area* (PCMA) and *primary census agglomeration(s)* [PCA(s)]. A CMA may not be consolidated with another CMA.

Census Agglomeration (CA)

A census agglomeration (CA) is a large urban area (known as the urban core) together with adjacent urban and rural areas (known as urban and rural fringes) that have a high degree of social and economic integration with the urban core. A CA has an urban core population of at least 10,000, based on the previous census. However, if the population of the urban core of a CA declines below 10,000, the CA is retired. Once a CA attains an urban core population of at least 100,000, based on the previous census, it is eligible to become a CMA. CAs that have urban cores of at least 50,000, based on the previous census, are subdivided into census tracts. Census tracts are maintained for CAs even if the population of the urban cores subsequently fall below 50,000. A CA may be consolidated with adjacent CAs if they are socially and economically integrated. This new grouping is called a consolidated CA and the component CAs are called primary census agglomerations (PCAs).

Consolidated Census Metropolitan Area (Consolidated CMA)

A consolidated census metropolitan area (consolidated CMA) is a grouping of one census metropolitan area (CMA) and adjacent census agglomeration(s) CA(s) that are socially and economically integrated. An adjacent CMA and CA can be consolidated into a single CMA (consolidated CMA) if the total commuting interchange between them is equal to at least 35% of the employed labour force living in the CA. Several CAs may be consolidated with a CMA; each CMA-CA combination is evaluated for inclusion. For example, the consolidated Toronto CMA is composed of the Toronto PCA and the PCAs of Georgina, Milton, Halton Hills, Orangeville and Bradford West Gwillimbury.

Consolidated Census Agglomeration (Consolidated CA)

A consolidated census agglomeration (consolidated CA) is a grouping of adjacent census agglomerations (CAs) that are socially and economically integrated. Adjacent CAs are consolidated into a single CA (consolidated CA) if the total commuting interchange between two CAs is equal to at least 35% of the employed labour force living in the smaller CA. Several CAs may be consolidated with a larger CA; each pair of CAs is evaluated for inclusion. For example, the consolidated Chatham CA is composed of the Chatham PCA and the Wallaceburg PCA.

Primary Census Metropolitan Area (PCMA)

A census metropolitan area that is a component of a *consolidated census metropolitan area* is referred to as a primary census metropolitan area (PCMA).

Primary Census Agglomeration (PCA)

A census agglomeration that is a component of a *consolidated census metropolitan area* or *consolidated census agglomeration* is referred to as the primary census agglomeration (PCA).

Census Subdivision (CSD)

Census subdivision is the general term applying to municipalities (as determined by provincial legislation) or their equivalent (for example, Indian reserves, Indian settlements and unorganized territories).

In Newfoundland, Nova Scotia and British Columbia, the term also describes geographic areas that have been created by Statistics Canada in cooperation with the provinces as equivalents for municipalities for the dissemination of statistical data.

Census Tract (CT)

Census tracts (CTs) are small geographic units representing urban or rural neighbourhood-like communities created in *census metropolitan areas* and census agglomerations (with an urban core population of 50,000 or more at the previous census).

CTs are initially delineated by a committee of local specialists (for example, planners, health and social workers, educators) in conjunction with Statistics Canada. Once a census metropolitan area (CMA) or *census agglomeration* (CA) has been subdivided into census tracts, the census tracts are maintained even if the urban core population of the CMA or CA subsequently declines below 50,000.

Coordinate System

A coordinate system is a mathematical method for specifying location. The coordinates can be spherical (latitude and longitude) or plane rectangular (such as Universal Transverse Mercator).

Designated Place (DPL)

Designated place refers to areas created by provinces to provide services and to structure fiscal arrangements for submunicipal areas which are often within unorganized areas.

The concept of a designated place generally applies to small communities for which there may be some level of legislation, but the communities fall below the criteria established for municipal status, that is, they are "submunicipal" or unincorporated areas.

Digital Boundary Files (DBFs)

Digital boundary files (DBFs) are computer files that depict the official boundaries of standard census geographic areas. The boundaries sometimes extend beyond shorelines into water.

Digital Cartographic Files (DCFs)

Digital cartographic files (DCFs) are computer files that depict boundaries of standard census geographic areas which have been modified to follow shorelines and to include lakes.

Economic Region (ER)

An economic region is a grouping of complete *Census Divisions* (with one exception in Ontario). Prince Edward Island and the two territories each consist of one economic region. Economic regions are used to analyse regional economic activity.

Enumeration Area (EA)

An enumeration area (EA) is the geographic area canvassed by one census representative. It is the smallest standard geographic area for which census data are reported. All the territory of Canada is covered by EAs.

Federal Electoral District (FED)

A federal electoral district refers to any place or territorial area entitled to elect a representative member to serve in the House of Commons (source: Canada Elections Act, 1990). There are 295 FEDs in Canada according to the 1987 Representation Order and there are 301 FEDs in Canada according to the 1996 Representation Order.

Geocoding

Geocoding is the process of assigning geographic identifiers (codes) to map features and data records. The resulting geocodes permit data to be linked geographically. Statistics Canada's geocoding service links census households to small geographic units. This process makes it possible to produce census data tabulations for non-standard geographic areas such as provincial and municipal electoral districts, local planning areas and school districts.

Geographic Code

A geographic code is a unique number used to identify and access standard geographic areas for the purposes of data storage, retrieval and display.

Geographic Reference Date

The geographic reference date is a date determined by Statistics Canada for the purpose of finalizing the geographic framework for which census data will be collected, tabulated and reported. For the 1996 Census, the geographic reference date is January 1, 1996.

Map Projection

A map projection is both the process and result of transforming positions on the spherical surface of the earth onto a plane (flat) surface.

Postal Code

The postal code is a six-character code defined and maintained by Canada Post Corporation for sorting and delivering mail.

Province/Territory

Province and territory refer to the major political divisions of Canada. From a statistical point of view, they are a basic unit for which data are tabulated and cross-classified. The ten provinces combined with the two territories cover the complete country.

Reference Map

Census reference maps show the location of the geographic areas for which census data are tabulated and disseminated. The main information depicted includes the boundaries, names and codes of census geographic areas, and major physical and cultural features such as roads, railroads, coastlines, rivers and lakes.

Representative Point

A representative point is a single point that represents a linear feature (*block-face*) or an areal feature (enumeration area). The point's location generally indicates either dwelling concentrations or centrality.

Rural Area

Rural areas are sparsely populated lands lying outside urban areas.

Standard Geographical Classification (SGC)

The Standard Geographical Classification (SGC) is Statistics Canada's official classification of geographic areas in Canada. The SGC provides unique numeric identification (codes) for three types of geographic areas. These are provinces and territories, *census divisions* (CDs) and census subdivisions (CSDs). The three geographic areas are hierarchically related.

Street Network Files (SNFs)

The street network files (SNFs) are digital files representing the street network for most large urban centres in Canada. The files also contain other visible physical and cultural features (such as hydrography, railroads, pipelines) and attribute information (for example, street and hydrographic names, and address ranges for streets with assigned addresses).

Urban Area (UA)

Urban areas have minimum population concentrations of 1,000 and a population density of at least 400 per square kilometre, based on the previous census population counts. All territory outside urban areas is considered rural. Taken together, urban and rural areas cover all of Canada.

Appendix B. Structure of the postal code

The Canadian postal code is an alpha-numeric combination of six characters describing the destination of each item of mail addressed in Canada. The characters are arranged in the form "ANA NAN" where "A" represents an alphabetic character and "N" represents a numeric character (e.g. K1A 0T6). The postal code uses 20 alphabetic characters and 10 numeric characters. Six alphabetic characters (D, F, I, O, Q and U) are not in use at the present time.

The first character of a postal code is allocated in alphabetic sequence from east to west across Canada and denotes a province, territory or a major sector found entirely within the boundaries of a province:

Province/Territory/Region	first character of the postal code	Province/Territory/Region	first character of the postal code
Newfoundland	A	Toronto Metropolitan	M
Nova Scotia	B	Southwestern Ontario	N
Prince Edward Island	C	Northern Ontario	P
New Brunswick	E	Manitoba	R
Quebec East	G	Saskatchewan	S
Montreal Metropolitan	H	Alberta	T
Quebec West	J	British Columbia	V
Eastern Ontario	K	Northwest Territories	X
Central Ontario	L	Yukon Territory	Y

In the Postal Code Conversion File there are 68 postal code records that are linked to a different province from their first character allocation. Provincial counts for these records assign these to the province where the single link indicator has been set to "1".

The first three characters of the postal code ("ANA") represent a set of well-defined and stable areas known as Forward Sortation Areas (FSAs). The FSA represents a specific area within a major geographical region or province. As of June 1997, there were 1,505 FSAs in use across Canada. There were 1,310 FSAs with urban mail delivery service and only 195 with rural mail delivery service. Rural FSAs are identifiable by the presence of a zero (0) in the second position of the FSA code.

The last three characters of the postal code ("NAN") identify routes known as local delivery unit (LDUs). In urban areas, a single postal code can correspond to the following types of LDUs:

- a block-face (one side of a city street between consecutive intersections)
- a community mail box (commonly called super mailboxes)
- an apartment building
- a business building
- a large firm/organisation that does considerable business with Canada Post Corporation
- a federal government department, agency or branch
- a mail delivery route (rural, suburban or mobile)
- general delivery at a specific post office
- one or more post office boxes

In new urban growth areas, postal codes are now linked to community mail boxes. A community mail box postal code can service both odd and even sides of the same street, or different streets, within a 300 metre radius of the community mail box.

In *rural areas*, the Local Delivery Unit (LDU) refers to all services which originate from a post office or postal station. These include rural routes, general deliveries, Post Office boxes, and suburban services. Often, rural postal codes represent the location of the place where the mail is sorted and not the final place of delivery.

Appendix C. Census subdivision types by province and territory, 1996

Census subdivision type	Total	Nfld.	P.E.I.	N.S.	N.B.	Quebec	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
BOR Borough	1	-	-	-	-	-	-	1	-	-	-	-	-
C City - Ville	145	3	2	2	7	2	51	5	13	15	43	1	1
CC Chartered Community	2	-	-	-	-	-	-	-	-	-	-	-	2
CM County (Municipality)	28	-	-	-	-	-	-	-	-	28	-	-	-
COM Community	163	130	33	-	-	-	-	-	-	-	-	-	-
CT Canton (Municipalité de)	88	-	-	-	-	88	-	-	-	-	-	-	-
CU Cantons unis (Municipalité de)	8	-	-	-	-	8	-	-	-	-	-	-	-
DM District Municipality	50	-	-	-	-	-	-	-	-	-	50	-	-
HAM Hamlet	36	-	-	-	-	-	-	-	-	-	-	2	34
ID Improvement District	10	-	-	-	-	-	2	-	-	8	-	-	-
IGD Indian Government District	2	-	-	-	-	-	-	-	-	-	2	-	-
LGD Local Government District	21	-	-	-	-	-	-	21	-	-	-	-	-
LOT Township and Royalty	67	-	67	-	-	-	-	-	-	-	-	-	-
M Municipalité	557	-	-	-	-	557	-	-	-	-	-	-	-
MD Municipal District	49	-	-	12	-	-	-	-	-	37	-	-	-
NH Northern Hamlet	12	-	-	-	-	-	-	-	12	-	-	-	-
NT Northern Town	2	-	-	-	-	-	-	-	2	-	-	-	-
NV Northern Village	13	-	-	-	-	-	-	-	13	-	-	-	-
P Paroisse (Municipalité de)	344	-	-	-	-	344	-	-	-	-	-	-	-
PAR Parish	152	-	-	-	152	-	-	-	-	-	-	-	-
R Indian Reserve - Réserve indienne	996	1	4	24	19	30	140	77	120	88	487	4	2
RC Rural Community	1	-	-	-	1	-	-	-	-	-	-	-	-
RGM Regional Municipality	1	-	-	1	-	-	-	-	-	-	-	-	-
RM Rural Municipality	404	-	-	-	-	-	-	106	298	-	-	-	-
RV Resort Village	42	-	-	-	-	-	-	-	42	-	-	-	-
S-E Indian Settlement - Établissement indien	33	-	-	-	-	5	10	4	1	4	3	6	-
SA Special Area	3	-	-	-	-	-	-	-	-	3	-	-	-
SCM Subdivision of County Municipality	38	-	-	38	-	-	-	-	-	-	-	-	-
SET Settlement	31	-	-	-	-	-	-	-	-	-	-	13	18
SM Specialized Municipality	2	-	-	-	-	-	-	-	-	2	-	-	-
SRD Subdivision of Regional District	71	-	-	-	-	-	-	-	-	-	71	-	-
SUN Subdivision of Unorganized	91	91	-	-	-	-	-	-	-	-	-	-	-
SV Summer Village	54	-	-	-	-	-	-	-	-	54	-	-	-
T Town	685	156	7	33	28	-	147	36	145	111	14	3	5
TI Terre inuite	10	-	-	-	-	10	-	-	-	-	-	-	-
TP Township	468	-	-	-	-	-	468	-	-	-	-	-	-
TR Terres réservées	9	-	-	-	-	9	-	-	-	-	-	-	-
UNO Unorganized - Non organisé	152	-	-	-	-	112	20	11	2	-	-	2	5
V Ville	257	-	-	-	-	257	-	-	-	-	-	-	-
VC Village cri	8	-	-	-	-	8	-	-	-	-	-	-	-
VK Village naskapi	1	-	-	-	-	1	-	-	-	-	-	-	-
VL Village	863	-	-	-	76	154	108	38	322	117	43	4	-
VN Village nordique	14	-	-	-	-	14	-	-	-	-	-	-	-

Appendix D. Representative points

A representative point is a single point (x,y co-ordinate) that gives the location of an enumeration area (EA) or a block-face. Block-face representative points are provided for those postal codes where the street and address information from Canada Post could be successfully matched with block face address ranges within SNF areas. EA representative points are provided in all other cases. While this is much less precise and may not be suitable for very small area market studies, it is readily available and may give an acceptable level of precision for larger scale studies.

Representative points are assigned using the following methods:

Block-Face Representative Point

Block-face representative points are computed within all Street Network Files (SNFs) along addressable streets, and addressable sections of highways, between two consecutive intersecting features, or between the end of a street and the next intersection, whenever the intersecting feature is not a property boundary such as a park or airport. The representative point is located at the mid-point of the block-face, set back a perpendicular distance of 22, 11, 5 or 1 metre(s) from the street centre line. This is done to ensure that all points have unique co-ordinates, are located in the correct block, and are located closest to the street to which they are assigned.

Enumeration Area (EA) Representative Point

Statistics Canada defines a point in each enumeration area (EA) for the purpose of assigning aggregate data to that point for data retrieval, data analysis or statistical mapping. This point is called the EA representative point. It is defined as a pair of coordinate values (x,y) which is located by the following methods:

1. For EAs within Street Network File coverage, representative points are computed by an automated method that locates the point roughly in the visual centre of the land-based portion of the EA. If an EA is in multiple parts, the representative point is located, when possible, in the portion with the largest number of occupied private dwellings. However, in some cases, the representative point is located in the EA portion having the largest land area.
2. For EAs outside SNF coverage, representative points are located by a manual procedure based on a visual inspection of building and/or street patterns on EA reference maps. The representative point is located, when possible, within a predominant cluster of buildings and/or streets. If there is no predominant cluster, then the point is located between two or more clusters. In the absence of any cluster, the point is placed at the visual centre of the EA. If an EA is in multiple parts, the point is located in the portion with the largest number of dwellings. The representative point is normally located in the land-based portion of the EA.

All EA representative points are guaranteed to fall within the appropriate EA using an automated topology check. The method of derivation of these points assures that they are 100% consistent with all of the Digital Boundary Files (i.e. if the points are plotted as an additional layer with the Digital Boundary Files, the points will fall in the correct boundary polygon).

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Revised 12/11/96

Geography products and services

This section provides brief descriptions of Geography products and services related to the 1996 Census. For additional details, contact the nearest Statistics Canada Regional Reference Centre.

General Reference Products

92F0085XCB GeoRef

GeoRef is a powerful data retrieval and tabular output tool with software and data on a CD-ROM. GeoRef allows users to explore the links between all standard levels of geography and to determine geographic codes, names, and population and dwelling counts. In addition to the standard census areas, GeoRef provides EA correspondence data (for 1996 census EAs and 1991 EAs) and an EA reference map listing that facilitates identification of appropriate EA reference maps.

Reference Maps

Reference maps identify census geographic areas and assist users in locating boundaries, allowing them to relate census data to actual physical locations. Over 7,500 reference maps are available for geographic areas that range in size from enumeration areas (the census collection unit) to federal electoral districts (Members of Parliament's ridings), from census tracts (neighbourhoods) to census agglomerations and census metropolitan areas (large urban centres), and from census subdivisions (municipalities) to census divisions (counties). Reference maps are available individually or as sets.

92F0087XPB Federal Electoral Districts/Enumeration Areas (FED/EA) Reference Maps (1987 Representation Order)

These reference maps show 1996 Census enumeration areas by federal electoral district. The federal electoral district boundaries are based on the 1987 Representation Order which was in effect on Census Day (May 14, 1996). These FED/EA maps are designed for the general reference of EA boundaries. For more specific identification of enumeration areas, users should refer to the more detailed EA Reference Maps for Large Urban (92F0090XPB), Small Urban (92F0088XPB) and Rural (92F0091XPB) areas. The FED/EA maps are reproduced on demand.

92F0090XPB "Large Urban Enumeration Areas (EA) Reference Maps

These black and white EA reference maps cover all 25 census metropolitan areas (CMAs) and the 18 census agglomerations (CAs) that are in the Census Tract Programme. Approximately 4,200 maps - generally one map per census tract - show enumeration area (EA) boundaries and codes on a background of detailed street networks and other visible features. Also shown on the maps are census tract, census subdivision, federal electoral district and CMA or CA boundaries. These maps are reproduced on demand. Package prices are available when all Large Urban (92F0090XPB), Small Urban (92F0088XPB) and Rural (92F0089XPB) EA Reference Maps for Canada or Provinces and Territories are purchased together.

92F0088XPB Small Urban Enumeration Areas (EA) Reference Maps

Approximately 870 reference maps cover smaller urban municipalities (census subdivisions) not in the Census Tract Programme. The maps depict enumeration area (EA) boundaries and codes. Federal electoral districts are also

shown on these maps. The size and scale of the maps vary, depending on the area covered. These maps are reproduced on demand. Package prices are available when all Large Urban (92F0090XPB), Small Urban (92F0088XPB) and Rural (92F0089XPB) EA Reference Maps for Canada or Provinces and Territories are purchased together.

92F0091XPB Rural Enumeration Areas (EA) Reference Maps

Approximately 2,400 maps depict enumeration area boundaries and codes in rural areas of Canada. Also shown are boundaries for census subdivisions, *census divisions*, federal electoral districts, census metropolitan areas and tracted census agglomerations. The maps, based on Natural Resources Canada's national topographic series, are at a scale of 1:50,000 or 1:250,000 for the 10 provinces and at a scale of 1:1,000,000 for Yukon Territory and 1:4,000,000 for Northwest Territories. These maps are reproduced on demand. Package prices are available when all Large Urban (92F0090XPB), Small Urban (92F0088XPB) and Rural (92F0089XPB) EA Reference Maps for Canada or Provinces and Territories are purchased together.

92F0089XPB Census Divisions and Census Subdivisions (CD/CSD) Reference Maps: Individual Maps

A total of 21 provincial maps showing the boundaries, names and codes for *census divisions* (areas such as counties and regional districts) and census subdivisions (such as cities, municipalities, towns, villages, other local municipal entities, townships and Indian reserves) are available for sale individually. The maps also show the boundaries for census metropolitan areas and census agglomerations. Each province is covered by one to four maps, with scales ranging from 1:375,000 to 1:6,000,000. The maps have the same general look as in 1991, although they have been produced using computer-assisted technology from digital geographic databases. The reference information, including water bodies, major roads and railroads, comes from the Digital Chart of the World (DCW).

Note: The entire set of provincial maps are available in the publication, Standard Geographical Classification, Volume II (Catalogue No. 12-572-XPB). Also included in the publication are three maps of Canada at 1:10,000,000 scale, one showing *census divisions*, one showing economic regions, and one showing point locations of census metropolitan areas and census agglomerations.

92-354-XPB Census Metropolitan Areas, Census Agglomerations and Census Tracts (CMA/CA/CT) Reference Maps

This publication includes reference maps of all census metropolitan areas (55 maps covering 25 CMAs) and census agglomerations with census tracts (29 maps covering 18 CAs). The maps show boundaries and names of the census tracts, census subdivisions, primary census metropolitan areas and primary census agglomerations which make up the CMAs/CAs, as well as the urban core, urban fringe and rural fringe. Also shown are rivers, lakes, railroad tracks, provincial boundaries and other significant features. The map scales range from 1:25,000 to 1:2,000,000. The publication also includes a Canada map (1:10,000,000 scale) showing point locations of census metropolitan areas and census agglomerations in 1996.

92F0092XPB Census Metropolitan Areas, Census Agglomerations and Census Tracts (CMA/CA/CT) Reference Maps - Individual Maps

Individual reference maps for census metropolitan areas (55 maps covering 25 CMAs) and census agglomerations with census tracts (29 maps covering 18 CAs) are available. The maps show boundaries and names of the census tracts, census subdivisions, primary census metropolitan areas and primary census agglomerations which make up

the CMAs/CAs, as well as the urban core, urban fringe and rural fringe. Also shown are rivers, lakes, railroad tracks, provincial boundaries and other significant features. The map scales range from 1:25,000 to 1:2,000,000.

Note: The entire set of maps is available in the publication *Census Metropolitan Areas, Census Agglomerations and Census Tracts. Reference Maps* (Catalogue No. 92-354-XPB).

Population and Dwelling Counts

Population and dwelling counts from the 1996 Census are available in a variety of formats and geographic breakdowns. In addition to the publication and CD-ROM described below, population and dwelling counts are available in GeoRef (92F0085XCB) and the *Block-face Data File* (92F0026XDB).

93-357-XPB A National Overview. Population and Dwelling Counts

This publication provides population and dwelling counts established by the 1996 Census of Canada. The levels of geography covered are: provinces and territories, federal electoral districts (1987 Representation Order), *census divisions*, census subdivisions, designated places, census metropolitan areas and census agglomerations, urban and rural areas. The geographic boundaries of these areas are those that were in force on January 1, 1996 (geographic reference date for the 1996 Census of Canada). The publication also includes population and dwelling counts for forward sortation areas (first three characters of the postal code) as reported by census respondents on Census Day (May 14, 1996).

92F0086XCB Postal Code Counts

Postal Codes Counts is a new product for 1996 that contains population and dwelling counts for all six-character postal codes reported by respondents. The population and dwelling counts are provided by individual postal code, by forward sortation area (FSA - first three characters of the six-character postal code) and by province or territory. The data are provided with Windows™-based software that enables users to perform simple data manipulations such as searching the data set for specific postal codes, importing groups of postal codes for which counts are required and exporting groupings of postal codes. Documentation and reference material are contained in electronic form on the CD-ROM.

Digital Boundary Files and Digital Cartographic Files

Digital Boundary Files (DBFs) portray the official boundaries used for 1996 Census collection and, therefore, often extend as straight lines into bodies of water. In Digital Cartographic Files (DCFs), these boundaries were modified to follow the coastlines and shorelines on the perimeter of Canada's land mass, including major islands. The DCFs also include a separate map layer showing lakes and some rivers and estuaries. This "water" layer can be used for additional reference purposes when mapping or displaying the boundaries. DCFs provide a framework for thematic mapping and geographic analysis that are possible using commercially available geographic information systems (GIS) or other mapping software. DBFs may not be suitable for mapping or display where realistic shoreline is required. The DCFs are available by standard packages and prices; DBFs are available on request for the same price.

92F0029XDE Provinces and Territories Digital Boundary File/Digital Cartographic File

The Provinces and Territories Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. The boundaries of the provinces and territories were generalised to meet the requirements of most desk-top mapping packages. Consequently, this product is not consistent with others in the series. The Provinces and Territories DCF is available as a standard package for Canada.

92F0030XDE Federal Electoral Districts (1987 Representation Order) Digital Boundary File/Digital Cartographic File

The Federal Electoral Districts (1987 Representation Order) Digital Boundary File and Digital Cartographic File were created by aggregating the component EA boundaries from the 1996 Census. They may differ slightly from the Digital Boundary File based on 1991 enumeration areas (92F0070XDB). The Federal Electoral Districts Digital Cartographic File is a new product and is available in two versions. The boundaries of the first version are consistent with all other levels of standard geography. A more generalised version is also available for small scale mapping of the country as a whole. The two versions of the FED DCF are available as a standard package for Canada.

92F0031XDE Federal Electoral Districts (1996 Representation Order) Digital Cartographic File

The Federal Electoral Districts (1996 Representation Order) Digital Cartographic File depicts the boundaries of the Federal Electoral Districts (FEDs) according to the 1996 Representation Order. Since this is not a standard level of geography for the 1996 Census, the cartographic file was created with a different methodology and, therefore, is not entirely consistent with other files in the series. Users should be aware that the FED boundaries used for the taking of the 1996 Census were based on the 1987 Representation Order. The 1996 representation order was proclaimed on January 8, 1996 and is in force on the first dissolution of Parliament that occurs at least one year after its proclamation. The Federal Electoral Districts (1996 Representation Order) DCF is available as a standard package for Canada.

92F0032XDE Census Divisions Digital Boundary File/Digital Cartographic File

The Census Divisions Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. The Census Divisions DCF is available in two versions. The boundaries of the first version are consistent with all other levels of standard geography. A more generalised version is also available for small scale mapping of the country as a whole. The two versions of the Census Divisions DCFs are available as a standard package for Canada.

92F0033XDE Census Consolidated Subdivisions Digital Boundary File/Digital Cartographic File

The Census Consolidated Subdivisions Digital Boundary (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. Census Consolidated Subdivisions DCFs are available as standard packages for Canada and the provinces and territories.

92F0034XDE Census Subdivisions Digital Boundary File/Digital Cartographic File

The Census Subdivisions Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. The Census Subdivisions DCF is available as a standard package for Canada, provinces and territories, census metropolitan areas (CMAs) and census agglomerations (CAs) with census tracts.

92F0035XDE Census Metropolitan Areas/Census Agglomerations Digital Boundary File/Digital Cartographic File

The 1996 Census Metropolitan Areas/Census Agglomerations Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. The Census Metropolitan Areas/Census Agglomerations DCF is available as a standard package for Canada.

92F0036XDE Census Tracts Digital Boundary File/Digital Cartographic File

Users of the 1991 Census Tracts Digital Cartographic File will notice a major difference between the 1991 and the 1996 product. In 1991, all bodies of water were integrated with the boundaries on a single map layer. The 1996 boundaries follow the coastlines and shorelines on the perimeter of Canada's land mass, including major islands. Users can see the remaining shorelines (in-land bodies of water) by overlaying the separate "water" layer. The 1996 Census Tracts DCFs are consistent with all other levels of standard geography. This was not case in 1991. The Census Tracts DCFs are available as standard packages for Canada, the provinces, census metropolitan areas and census agglomerations with census tracts.

92F0037XDE Urban Areas Digital Boundary File/Digital Cartographic File

The Urban Areas Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. The Urban Areas DCF is available as a standard package for Canada.

92F0038XDE Designated Places Digital Boundary File/Digital Cartographic File

The Designated Places Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. Designated places are a new standard geography level for 1996. The Designated Places DCF is available as a standard package for Canada.

92F0039XDE 1996 Census Forward Sortation Areas Digital Cartographic File

The 1996 Census Forward Sortation Areas (FSAs) Digital Cartographic File depicts FSA boundaries derived from postal codes captured from the 1996 Census questionnaires. By analysing the postal codes reported by census households, a single FSA was assigned to each enumeration area (most often the FSA reported by the largest number of census households). FSA polygons were formed by grouping enumeration areas. Therefore, the Census based FSA boundaries respect enumeration area boundaries. The 1996 Census Forward Sortation Areas DCF is available as a standard package for Canada.

92F0040XDE Enumeration Areas (EA) Digital Boundary File/Digital Cartographic File

The Enumeration Areas Digital Cartographic File (DCF) is available for the first time. In 1991, only the Digital Boundary File was available. The EA DCFs are available as standard packages for Canada, the provinces and territories and Census Metropolitan Areas (CMA) and some Census Agglomerations (CA).

Digital Street Files

Geography Division maintains a street network database of Canada's large urban centres on an ongoing basis. While this database represents less than 1 % of Canada's land area, it accounts for 62% of Canada's population.

Several products originate from this database including very detailed Street Network Files, less detailed Skeletal Street Network Files, and the Block-face Data File.

92F0024XDE Street Network Files (SNF)

The Street Network Files (SNFs) are digital files representing the street network for most large urban centres in Canada. The files also contain other visible physical and cultural features (such as hydrography, railroads, pipelines) and attribute information (for example, street and hydrographic names and address ranges for streets with assigned addresses). Streets and addresses are updated to reflect the information collected on Census Day - May 14, 1996. In combination with the user's appropriate software, the Street Network Files are useful for route planning, delivery services and mapping. The SNFs are available as standard packages for Canada, all provinces but Prince Edward Island, and for Census Metropolitan Areas (CMA) and some Census Agglomerations (CA).

92F0025XDE Skeletal Street Network Files (SSNF)

The Skeletal Street Network Files (SSNF) are "thinned-out" Street Network Files consisting of cartographic reference features such as major streets (with street names but no address ranges) and some railway features used to define the census tract boundaries. The SSNFs are available as standard packages for Canada, Census Metropolitan Areas (CMA) and some Census Agglomerations (CA).

92F0100XDE - 92F0103XDE; 92F0105XDE - 92F0136XDE Street Network and Feature Extension Files (SNFEF)

The Street Network and Extension Files (SNFEFs) are digital files that extend the coverage of the Street Network Files (SNFs) to the defined limits of the census metropolitan area / census agglomeration (CMA/CA). The SNFEFs contain all the features of the SNFs plus a road and feature network from the National Topographic Data Base (NTDB) extending from the SNF coverage to the CMA/CA limit. The NTDB based portion of the SNFEFs do not have address ranges.

SNFEFs cover a total of 29 centres: 26 CMAs and CAs that have partial SNF coverage, and 3 CAs with no SNF coverage.

Since standard boundary file products may not match the feature extensions in the SNFEF, adjusted boundary files are also available for clients wanting a complete CMA/CA package (see sections on Census Tracts DBF/DCF, Census Subdivisions DBF/DCF and Enumeration Areas DBF/DCF for specific information).

92F0026XDB Block-Face Data File (BFDF)

The Block-Face Data File (BFDF) contains 1996 Census population and dwelling counts for block-faces in urban centres covered by the Street Network Files (92F0024XDE). A block-face is generally one side of a city street between two consecutive intersections; it is also the smallest geographical unit available from Statistics Canada. The BFDF also links the block-face to all other levels of standard geography (enumeration areas and above) through geographic codes. The file includes street names with address ranges as well as co-ordinates for a point representing the approximate centre of each block-face. The BFDFs are available as standard packages for Canada and for large urban centres.

Postal Code Products

The postal code products described below use postal codes that are obtained regularly from Canada Post Corporation. Two other products listed above, Postal Code Counts (92F0086XCB) and 1996 Census Forward Sortation Areas Digital Cartographic File (93F0038XDE), are based on postal codes provided by respondents on census questionnaires.

92F0027XDB 1996 Postal Code Conversion File (PCCF)

The Postal Code Conversion File (PCCF) provides a link between the six-character postal code and the standard 1996 Census geographic areas (such as enumeration areas, municipalities, census tracts, etc.). It also provides the x,y co-ordinates for a point representing the approximate location of the postal code to support mapping. The PCCF is available as standard packages for Canada, the provinces and territories, and for large urban centres.

92F0027UDB 1996 Postal Code Conversion File (PCCF) - Update

The Postal Code Conversion File (PCCF) provides a link between the six-character postal code and the standard 1996 Census geographic areas (such as enumeration areas, municipalities, census tracts, etc.). It also provides the x,y co-ordinates for a point representing the approximate location of the postal code to support mapping. The PCCF is updated on a semi-annual basis. Updates released in July provide new postal codes as of January of the release year. Updates released in January provide new postal codes as of July of the previous year. Clients must purchase the Postal Code Conversion File (92F0027XDB) at the initial cost; then subsequent updated files may be purchased at the update rate. An additional discount on updates is given to PCCF update subscribers. The subscription will require that they pay in advance for at least one updated file per year until the new PCCF for the 2001 Census is released. The PCCF updates are available as standard packages for Canada and provinces and territories.

92F0028XDB Postal Codes by Federal Ridings (1996 Representation Order) File

The Postal Codes by Federal Ridings (1996 Representation Order) File (PCFRF) is a flat ASCII file which provides a link between the six character postal code and Canada's federal electoral districts (1996 Representation Order). A federal electoral district (FED) is any place or territorial area entitled to return a member of Parliament (MP) to serve in the House of Commons and is commonly referred to as a federal riding. The PCFRF is available as standard packages for Canada and for 5 regions - Atlantic Provinces, Quebec, Ontario, Prairie Provinces and Northwest Territories, and British Columbia and Yukon Territory.

92F0028UDB Postal Codes by Federal Ridings (1996 Representation Order) File (PCFRF) - Update

The Postal Codes by Federal Ridings (1996 Representation Order) File (PCFRF) is a flat ASCII file which provides a link between the six character postal code and Canada's federal electoral districts (1996 Representation Order). A federal electoral district (FED) is any place or territorial area entitled to return a member of Parliament (MP) to serve in the House of Commons and is commonly referred to as a federal riding. The PCFRF is updated on a semi-annual basis. Updates released in July provide new postal codes as of January of the release year. Updates released in January provide new postal codes as of July of the previous year. Clients must purchase the PCFRF (92F0028XDB) at the initial cost; then subsequent updated files may be purchased at the update rate. The PCFRF updates are available for Canada and for 5 regions - Atlantic Provinces, Quebec, Ontario, Prairie Provinces and Northwest Territories, and British Columbia and the Yukon Territory.

Services**97C0005 Geocoding Service**

The Geocoding service allows users to define their own geographic areas of study (user defined areas or aggregations of standard census geographic areas) for census data tabulations. This custom geography is produced from an aggregation at the block-face level in large urban centres with Street Network File coverage, and at the enumeration level in small urban centres and rural areas. The user is thereby able to purchase census data for these custom areas. Cost estimates for this service will be provided based on the complexity of the request.

97C0006 Geography Custom Services

If the standard geography products do not satisfy a user's need, Geography Custom Services are available to produce non-standard geographic products by special request. Examples include alternative packaging of Digital Cartographic Files, special data retrievals, manipulations or merges using any of the geography computer files (postal codes, attribute files, boundary files and Street Network Files). Cost estimates for this service will be provided based on the nature and complexity of the request.

97C0007 Geography Custom Mapping

Thematic maps and other custom maps may be produced as a special request. Cost estimates for this service will be provided based on the complexity of the request.

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